

CLAIMS

1. (New) A control unit for a compression ignition internal combustion engine comprising:

an input terminal for an accelerator opening signal,
an input terminal for a brake depressing force signal,
an input terminal for a vehicle speed,

a micro computer for judging a compression ignition mode according to at least signals input to said input terminals and calculating at least a target amount of intake air and a target amount of fuel injection,

a first output terminal for outputting a control output corresponding to an intake air controlling device, and

a second output terminal for outputting a control output corresponding to said target amount of fuel injection calculated by said micro computer to a fuel injecting device.

2. (New) A control unit according to Claim 1, wherein

said micro computer provides a function of calculating an injecting timing and an amount of injection for injecting an air as an ignition trigger factor for promoting an ignition of fuel, and

said control unit further comprising a third output terminal for outputting a driving signal to said ignition trigger factor according to said air injecting timing and said amount of air injection.

3. (New) A control unit according to Claim 1, wherein

a control signal for a throttle valve driving motor for controlling an opening degree of a throttle valve from said first output terminal.

4. (New) A control unit according to Claim 1, wherein

a control signal for a solenoid mechanism for adjusting a opening/closing timing of an intake air valve from said first output terminal.

5. (New) A control unit according to Claim 2, wherein
a control signal for an air injecting valve for adjusting a an air injecting
timing and/or an amount of air injection of said air injecting valve from said
third output terminal.